



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,336	04/20/2001	Francis M. Anton, Jr.	VB.HEREUR.PT2	1893
24943 7590 01/15/2008 INTELLECTUAL PROPERTY LAW GROUP LLP 12 SOUTH FIRST STREET SUITE 1205 SAN JOSE, CA 95113			EXAMINER DAO, THUY CHAN	
			ART UNIT 2192	PAPER NUMBER
			MAIL DATE 01/15/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/839,336

**Applicant(s)**

ANTON, JR., FRANCIS M.

**Examiner**

Thuy Dao

**Art Unit**

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2192

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on October 31, 2007 has been entered.

2. Claims 1-24 have been examined.

### Response to Amendments

3. Per Applicant's request, claims 1, 9, and 17 have been amended.

### Response to Arguments

4. Rejections under section 102(e), Foltak (Remarks, pp. 9-11):

#### A) Independent claim 9:

The Applicants stated, "Amended claim 9 is not anticipated by Foltak for failure to teach 'automatic loading' of software 'immediately followed by checking' " (Remarks, page 11, lines 1-2).

However, as cited by the Applicants (Remarks, page 9, paragraph [0071]):

"...If the version 167 in the server 153 is different from the version 169 in the access point 143 (Block 181), the access point 143 begins a shutdown operation 183. The access point 143 stops making new connections, and waits until all current connections are terminated (Block 183). When all connections are terminated the access point 143 continues (Block 185) and loads (Block 187) the new version 167 of the access point software from the server memory 161 into the access point 143 RAM 149, replacing version 169" (specification, page 25, lines 2-7, emphasis added).

That is to say, "immediately following said checking" as claimed in lines 5-6 requires at least steps of: "begins a shutdown operation", "stops making new connections", and "waits until all current connections are terminated".

In light of said description, Foltak explicitly teaches "*automatically loading the second device management software, immediately following said checking*" (e.g.,

"In the present invention, downloading of firmware takes place as soon as it is possible without requiring a "busyout" of the modems of a module. That is, if any modem on a given module is in either a "Recovery Pending" or "Upgrade Pending" state and if there are no active calls remaining on that module, the module is downloaded to right away ..." (col.12: 59-65, emphasis added);

"It is safe to perform recovery during a time when no active calls are found within a given modem module. As such, if no active calls are allocated, even at a typically busy time such as 2:00 p.m. on a Monday, then downloading should proceed immediately as no customers will be impacted and the modems will be upgraded and/or recovered immediately" (col.10: 4-9, emphasis added); and

"This parameter is used to determine if module recovery is to be attempted as soon as a problem is found or to wait for the maintenance window, as discussed above. These two conditions are as follows: immediate: Don't bother waiting and attempt to recover module right away. pending: Mark the modem recovery pending and wait until maintenance time" (col.14: 48-56, emphasis added).

B) Dependent claims 10-16:

Dependent claims 10-16 are also rejected based on virtue of their dependencies on the rejected base claim 9.

5. Rejection under section 103(a), Foltak in view of Xu (Remarks, pp. 11-14):

A) Claims 1-8:

The Applicants stated, Foltak "...does not teach or suggest the limitations of amended claim 1 of 'directly begins loading upon checking' " (Remarks, page 13, lines 1-2).

However, as cited by the Applicants (Remarks, page 12, paragraph [0071]):

"...If the version 167 in the server 153 is different from the version 169 in the access point 143 (Block 181), the access point 143 begins a shutdown operation 183. The access point 143 stops making new connections, and waits until all current connections are terminated (Block 183). When all connections are terminated the access point 143 continues (Block 185) and loads (Block 187) the new version 167 of the access point software from the server memory 161 into the access point 143 RAM 149, replacing version 169" (specification, page 25, lines 2-7, emphasis added).

That is to say, "directly begins loading upon checking" as claimed in lines 7-8 requires at least steps of: "begins a shutdown operation", "stops making new connections", and "waits until all current connections are terminated".

In light of said description, Foltak explicitly teaches "*directly begins loading upon checking that said first software requires replacement*" (e.g.,

"In the present invention, downloading of firmware takes place as soon as it is possible without requiring a "busyout" of the modems of a module. That is, if any modem on a given module is in either a "Recovery Pending" or "Upgrade Pending" state and if there are no active calls remaining on that module, the module is downloaded to right away ..." (col.12: 59-65, emphasis added);

"It is safe to perform recovery during a time when no active calls are found within a given modem module. As such, if no active calls are allocated, even at a typically busy time such as 2:00 p.m. on a Monday, then downloading should proceed immediately as no customers will be impacted and the modems will be upgraded and/or recovered immediately" (col.10: 4-9, emphasis added); and

"This parameter is used to determine if module recovery is to be attempted as soon as a problem is found or to wait for the maintenance window, as discussed above. These two conditions are as follows: immediate: Don't bother waiting and attempt to recover module right away. pending: Mark the modem recovery pending and wait until maintenance time" (col.14: 48-56, emphasis added).

**B) Claims 17-24:**

Applicants' arguments have been considered but are moot in view of the new ground(s) of rejection.

**Claim Rejections – 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 9-16 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,606,298 to Foltak (art of record, hereinafter "Foltak").

**Claim 9:**

Foltak discloses *a method of maintaining software on a communication network access device, said method comprising:*

*first storing a first device management software in a memory in said device (e.g., FIG. 2, col.7: 27 – col.8: 60);*

*periodically checking availability of a second device management software (e.g., col.5: 52 – col.6: 5; col.12: 58 – col.13: 67); and*

*automatically loading the second device management software through said network for replacing said first software (e.g., FIG. 4a-b, col.10: 33 – col.12: 57),*

*immediately following said checking (e.g., col.12: 59-65; col.10: 4-9; col.14: 48-56)*

*such that the device is self-maintaining (e.g., col.4: 16-44; col.8: 42-60).*

**Claim 10:**

The rejection of claim 9 is incorporated. Foltak also discloses *inputting upgrade data to a server from a computer, said data for installing and storing said second device management software in said server (e.g., FIG. 3, col.8: 61 – col.10: 32).*

**Claim 11:**

The rejection of claim 10 is incorporated. Foltak also discloses *checking a version of said second software, and wherein said loading is performed if said second software is a different version from said first software (e.g., FIG. 5, col.15: 1-62).*

**Claim 12:**

The rejection of claim 11 is incorporated. Foltak also discloses *first authenticating an identity of said server to said device (e.g., col.7: 27 – col.8: 60).*

Art Unit: 2192

**Claim 13:**

The rejection of claim 12 is incorporated. Foltak also discloses *second authenticating an identity of said device to said server* (e.g., col.5: 52 – col.6: 5; col.8: 42-60).

**Claim 14:**

The rejection of claim 11 is incorporated. Foltak also discloses *automatically performing said checking and said loading at a predetermined time without manual maintenance from a user* (e.g., col.10: 33 – col.12: 57).

**Claim 15:**

The rejection of claim 14 is incorporated. Foltak also discloses *stopping an acceptance of a new connection prior to said loading* (e.g., col.8: 61 – col.10: 32).

**Claim 16:**

The rejection of claim 9 is incorporated. Foltak also discloses *automatically performing said loading at a predetermined time without manual maintenance from a user* (e.g., col.4: 16-44; col.5: 52 – col.6: 5).

**Claim Rejections – 35 USC § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltak in view of Xu (art of record, US Patent No. 6,151,628).

**Claim 1:**



Foltak discloses *a system for software maintenance of a network access device, said system comprising:*

*an access point device for making a wireless connection between a mobile computer and a communications network (e.g., FIG. 2, col.7: 27 – col.8: 60), said device including*

*a memory of software containing first device management software for providing a device management function (e.g., FIG. 3, col.8: 61 – col.10: 32; col.5: 52 – col.6: 5); and*

*software loading apparatus for automatically loading second software through said network for replacing said first software (e.g., col.12: 58 – col.13: 67; FIG. 4a-b, col.10: 33 – col.12: 57)*

*directly begins loading upon checking that said first software requires replacement (e.g., col.12: 59-65; col.10: 4-9; col.14: 48-56)*

*without manual maintenance by a user such that the access point device is self-maintaining (e.g., col.4: 16-44; col.8: 42-60).*

Foltak does not explicitly disclose *a wireless connection between a mobile computer and a communications network.*

However, in an analogous art, Xu further discloses *a wireless connection between a mobile computer and a communications network (e.g., FIG. 2, col.6: 38 – col.7: 56).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Xu's teaching into Foltak's teaching. One would have been motivated to do so to serve not only users dialing in over the public switched telephone network but also wireless users as suggested by Xu (e.g., col.6: 37-54).

**Claim 2:**

The rejection of claim 1 is incorporated. Foltak also discloses *a server including apparatus for receiving data input from a computer for installation and storing said second software for said loading by said software loading apparatus through said network (e.g., FIG. 5, col.15: 1-62).*

**Claim 3:**

The rejection of claim 2 is incorporated. Foltak also discloses *version checker apparatus for checking a version of said second software, and wherein said software loading apparatus loads said second software if a version of said second software is different from a version of said first software* (e.g., col.7: 27 – col.8: 60).

**Claim 4:**

The rejection of claim 3 is incorporated. Foltak also discloses *first authentication apparatus for authenticating an identity of said server to said device* (e.g., col.5: 52 – col.6: 5).

**Claim 5:**

The rejection of claim 4 is incorporated. Foltak also discloses *second authentication apparatus for authenticating an identity of said device to said server* (e.g., col.12: 58 – col.13: 67; col.8: 42-60).

**Claim 6:**

The rejection of claim 3 is incorporated. Foltak also discloses *automatic apparatus for automatically performing said checking and said loading at a predetermined time* (e.g., col.5: 52 – col.6: 5; col.8: 61 – col.10: 32).

**Claim 7:**

The rejection of claim 6 is incorporated. Foltak also discloses *shut-down apparatus for stopping an acceptance of new connections prior to said loading* (e.g., col.7: 27 – col.8: 60; col.12: 58 – col.13: 67).

**Claim 8:**

The rejection of claim 1 is incorporated. Foltak also discloses *said loading is performed automatically at a predetermined time* (e.g., col.15: 1-62).

Art Unit: 2192

11. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltak in view of Xu (art of record, US Patent No. 6,151) and further in view of US Patent No. 5,978,373 to Hoff et al. (art made of record, hereinafter "Hoff").

**Claim 17:**

*Foltak discloses a system providing access to a communication network comprising:*

*(a) an access point device for making a connection between a mobile user and a source network (e.g., FIG. 2, col.7: 27 – col.8: 60), said access point device including*

*first device management software for providing a device management function (e.g., col.5: 52 – col.6: 5; col.12: 58 – col.13: 67);*

*access device loading apparatus for loading second device management software through a network for replacing said first software (e.g., FIG. 4a-b, col.10: 33 – col.12: 57)*

*without manual maintenance by a user such that the access point device is self-maintaining (e.g., col.4: 16-44; col.8: 42-60);*

*(b) a mobile user to access the communication network through said access point device and said source network (e.g., FIG. 3, col.8: 61 – col.10: 32); and*

*(c) remote maintenance server apparatus including apparatus for receiving and storing an upgrade to said first software from a network connected computer for creation of said second software, and for facilitating said loading in cooperation with said access point device (e.g., col.15: 1-62; col.12: 58 – col.13: 67).*

Foltak does not explicitly disclose a wireless connection between a mobile user and a source network, user authorization server apparatus for authorizing a mobile user to access the communication network through said access point device and said source network.

However, in an analogous art, Xu further discloses:

Art Unit: 2192

*a wireless connection between a mobile user and a source network (e.g., FIG. 2, col.6: 38 – col.7: 56),*

*user authorization server apparatus for authorizing a mobile user to access the communication network through said access point device and said source network (e.g., FIG. 1, Authentication Servers 32A-B, col.9: 47 – col.10: 53).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Xu's teaching into Foltak's teaching. One would have been motivated to do so to serve not only users dialing in over the public switched telephone network but also wireless user as well as determine whether the user is authorized to access the system as suggested by Xu (e.g., col.6: 37-54; col.9: 48-65; col.10: 15-53).

Neither Foltak nor Xu explicitly discloses *the mobile user is authorized through one or more embedded IDs generated into an embedded reserved field of a file.*

However, in an analogous art, Hoff further discloses *the mobile user is authorized through one or more embedded IDs generated into an embedded reserved field of a file* (e.g., FIG. 4b, Completed Template Info Sent → If Info Same As Registration, Associate PC MAC With OLS → ... → FIG. 5, last step: Establish Session With Default OLS, col.7: 16-58 and col.8: 24-34, emphasis added).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Hoff's teaching into Foltak and Xu's teaching. One would have been motivated to do so to provide network access authentication suitable for network users as suggested by Xu (e.g., col.2: 1-15 and 62-65) as well as provide secure transmission of data as suggested by Hoff (e.g., col.2: 52 – col.3: 17).

**Claim 18:**

The rejection of claim 17 is incorporated. Xu further discloses *said authorization server apparatus includes*

*source network server apparatus including apparatus for receiving a request from said mobile user to access said communication network, and for*

Art Unit: 2192

*determining if said mobile user is currently authorized to access the communication network, and for a currently authorized mobile user to allow said authorized mobile user said access, and for an unauthorized mobile user, not to forward said request (e.g., col.6: 38 – col.7: 56);*

*redirection server apparatus for receiving from said source server said forwarded request by said unauthorized mobile user for communication network access, and for redirecting said request (e.g., col.9: 47 – col.10: 53); and*

*user authentication server apparatus for receiving said unauthorized user's request from said redirection server, and for authorizing said unauthorized mobile user to access said communication network (e.g., col.6: 38 – col.7: 56); and*

*gate keeper server apparatus for receiving an authorization from said authentication server and for informing said source network apparatus that said mobile user is to be allowed access to said communication network (e.g., col.9: 47 – col.10: 53).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Xu's teaching into Foltak's teaching. One would have been motivated to do so to as set forth in claim 17 above.

**Claim 19:**

The rejection of claim 17 is incorporated. Foltak also discloses *said access point device further includes version checker apparatus for checking a version of said second software, and wherein said loading apparatus loads said second software if a version of said second software is different from a version of said first software (e.g., col.7: 27 – col.8: 60).*

**Claim 20:**

The rejection of claim 19 is incorporated. Foltak also discloses *first authentication apparatus for authenticating an identity of said remote maintenance server to said access point device (e.g., col.5: 52 – col.6: 5; col.8: 61 – col.10: 32).*

**Claim 21:**

The rejection of claim 20 is incorporated. Foltak also discloses *second authentication apparatus for authenticating an identity of said access point device to said remote maintenance server* (e.g., col.12: 58 – col.13: 67; col.7: 27 – col.8: 60).

**Claim 22:**

The rejection of claim 19 is incorporated. Foltak also discloses *apparatus for automatically performing said checking and said loading at a predetermined time* (e.g., col.4: 16-44; col.5: 52 – col.6: 5).

**Claim 23:**

The rejection of claim 22 is incorporated. Foltak also discloses *shut-down apparatus for stopping an acceptance of new connections prior to said loading* (e.g., col.8: 42-60; col.15: 1-62).

**Claim 24:**

The rejection of claim 17 is incorporated. Foltak also discloses *said loading is performed automatically at a predetermined time* (e.g., col.10: 33 – col.12: 57; col.5: 52 – col.6: 5).

**Conclusion**

12. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.


The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Art Unit: 2192

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



**TUAN DAM**  
**SUPERVISORY PATENT EXAMINER**